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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GARY STEPHEN SHUSTER

Appeal 2016-005720 Application 14/089,639 Technology Center 3700

Before JENNIFER D. BAHR, MICHELLE R. OSINSKI, and BRANDON J. WARNER, *Administrative Patent Judges*.

OSINSKI, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Gary Stephen Shuster ("Appellant") appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 26–45 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Claims 1–25 are cancelled. Br. 11 (Claims App.).

THE CLAIMED SUBJECT MATTER

Claims 26 and 36 are independent. Claim 26 is reproduced below and is illustrative of the subject matter on appeal.

26. An apparatus comprising a processor operably coupled to a memory, the memory holding program instructions operated by the processor for:

controlling one or more member avatars in a modeled virtual reality environment at least partly in response to input received from a member client;

determining whether a guest client is invited by the member client;

enabling control of a guest avatar's activity in the modeled virtual reality environment in response to input data from the guest client; and

limiting the guest avatar's activity and continuously determining a limited area around the member avatar within which the guest avatar is permitted freedom of movement, based on determining that the guest client is invited by the member client.

OPINION

The Supreme Court has set forth "a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012)). Under that framework, we first "determine whether the claims at issue are directed to one of those patent-ineligible concepts"—i.e., a law of nature, a natural phenomenon, or an abstract idea. *Id.* If so, we secondly "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the

nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo*, 132 S. Ct. at 1298, 1297). The Supreme Court has described the second part of the analysis as "a search for an 'inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294).

Part one

The Examiner determines that "[t]he instant claims are drawn to the abstract idea of policies governing the privileges awarded to the guest of a member client," and this idea is akin to the "method[] of organizing human activit[y]" at issue in *Alice*. Final Act. 5–6. In particular, the Examiner determines that "[i]t is well known for real-world human organizations such as gyms and country clubs to enact policies that place restrictions on what resources are available for use by guests, what hours the guests can use the resources, and the like." *Id.* at 6. According to the Examiner, the step "of 'continuously determining a limited area around the member avatar within which the guest avatar is permitted freedom of movement' is equivalent to automating the human activity of host members having to keep their guests in their company, e.g. within their sight, while they are on a club premises." *Id.*

Appellant argues that "the claims are not directed to any discernable abstract idea," but are "directed to a sequence of complex and novel machine operations." Br. 4. In particular, Appellant asserts that the claimed subject matter is not similar to concepts the Supreme Court has identified as methods of organizing human activities or the example methods of

organizing human activity described in the July 2015 Update on Subject Matter Eligibility, 80 Fed. Reg. 45429 (July 30, 2015). *Id.* This argument is not persuasive.

In applying the framework set out in *Alice*, and as the first step of our analysis, we agree with the Examiner that the claims are directed to an abstract idea of governing privileges for a guest of a member, which is akin to a method of organizing human activity. Final Act. 5. Claims 26 and 36 recite steps of (1) controlling member and guest avatars in a virtual reality environment in response to respective input from member and guest clients; (2) determining whether a guest has been invited by a member; (3) limiting the guest avatar's activity; and (4) continuously determining a limited area around the member avatar within which the guest avatar is permitted to move. Br. 11, 12 (Claims App.). That is, the claims are conceptually equivalent to controlling the activity and access of guests (i.e., nonmembers) in a member-exclusive environment, and do not include any specific instructions as to how these concepts are to be implemented. As the Examiner explains, "the concepts claimed are well-known methods for managing the guest privileges awarded to a human being who is a guest of a member of an exclusive property, applied in a generic technological environment," wherein "[a]vatars, by definition, are virtual manifestations of human entities, intended to look and act like their human counterparts." Ans. 8. In this regard, the claims merely use "avatars to emulate the longknown idea of limiting what a guest can do and where a guest can go, when he accompanies the member of an exclusive property such as a country club or gym." Id.

Appellant also argues that "the claims here do not create problems related to preemption," but "are of limited scope and do not threaten to tie up the future of building blocks of human ingenuity." Br. 4–5. This argument is unpersuasive. Merely because claims do not preempt all forms of the abstraction does not make them any less abstract. See OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract."). Moreover, characterizing preemption as a driving concern for patent eligibility is not the same as characterizing preemption as the dispositive test for patent eligibility. Instead, "[t]he Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." Ariosa Diagnostics, Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing Alice, 134 S. Ct. at 2354). Although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." Id. The Federal Circuit concluded that "[w]here a patent's claims are deemed only to disclose patent ineligible subject matter under the Mayo framework, . . . preemption concerns are fully addressed and made moot." Id.; see also id. (holding that "[i]n this case, Sequenom's attempt to limit the breadth of the claims by showing alternative uses of cffDNA outside of the scope of the claims does not change the conclusion that the claims are directed to patent ineligible subject matter"). Given this direction from our reviewing court, we decline to apply a preemption standard in our

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analysis, and instead apply the steps set forth by the Supreme Court in *Alice* and *Mayo*.

Therefore, when read as a whole, independent claims 26 and 36 are directed to rules governing privileges awarded to a guest of a member client, and, for the reasons discussed above, constitute an abstract idea. The question to be settled next is whether the claims recite an element, or combination of elements, that is enough to ensure that the claims are directed to significantly more than an abstract idea.

Step two

The Examiner determines that the claims "apply [a] well-known type of abstract idea to a virtual environment, without providing significantly more than the idea itself." Final Act. 6. In particular, the Examiner determines:

The claims instruct that the abstract idea of limiting guest privileges is capable of being implemented by a general purpose computing device, without causing improvements to any technology, improvements in the functioning of the computer itself (the fact that a general purpose computer can be programmed for a new purpose is not improving the function of a computer itself), or providing any meaningful limitations beyond generally linking the abstract idea to the technological environments of the general purpose computing devices.

Id. According to the Examiner, "[t]he claims amount to nothing significantly more than an instruction to apply the abstract idea of implementing guest privilege policies using some unspecified, generic computer." *Id.*

Independent claims 26 and 36

Appellant argues that, even if claims 26 and 36 relate to an abstract idea, the claims "contain[] elements that represent significantly more than

th[e] idea itself." Br. 7. In particular, Appellant asserts that the claims recite steps directed "exclusively to controlling avatar activity in a virtual world," and "recite[] a specific application of controlling avatars by continuously determining a limited area around a member avatar within which the guest avatar is permitted freedom of movement." *Id.* According to Appellant, "the claims [do not] merely recite performing generic computer functions that are well-understood, routine and conventional activities known in the industry, as evidenced by the fact that there are no Section 102 and 103 rejections of the claims." *Id.*

To the extent Appellant argues that the claims necessarily contain an "inventive concept" based on their alleged novelty and non-obviousness over the prior art, this argument is unpersuasive. Although the second step in the *Alice/Mayo* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patentineligible. *See Mayo*, 132 S. Ct. at 1304.

Furthermore, the elements of "a processor" and "memory holding program instructions" recited in claim 26, and "at least one computer" recited in claim 36, are generic components that are well-understood, routine, and conventional in the computer and gaming industries. More specifically, the processor, memory, and computer elements are described in Appellant's Specification and claimed only in a wholly generic and functional manner, much like the computer components in *Alice*. *See Alice*,

134 S. Ct. at 2358–60. In other words, these elements function in a conventional manner to execute program instructions and operations. *See id.* at 2359–60 (holding patent-ineligible claims that "amount to 'nothing significantly more' than an instruction to apply the abstract idea . . . using some unspecified, generic computer" and in which "each step does no more than require a generic computer to perform generic computer functions") (internal quotation marks, citation omitted). The fact that these generic computer functions are applied to the particular environment of virtual reality is not sufficient to circumvent the prohibition against patenting an abstract idea. *See Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010).

Appellant argues that "the claimed solutions amount to an inventive concept for resolving the particular problem of allowing potential members of a VRU to try out the environment without paying for membership and without the potential disruption of the VRU environment for paying members." Br. 5 (citing *DDR*, 773 F.3d at 1259). In particular, Appellant asserts that "the problem of monitoring and restricting guest avatar behavior and movement arises specifically with regards to computer networks." *Id.* at 6. According to Appellant, the claims "recite[] a specific application of controlling avatars by continuously determining a limited area around a member avatar within which the guest avatar is permitted freedom of movement," and "[t]he invention improves the technology of VRU environments, and amounts to significantly more than 'organizing human activity." *Id.* at 7. This argument is unpersuasive.

The claims at issue in *DDR* address the problem of retaining website visitors who would otherwise be transported away from the host website after clicking on an advertisement on the host website and activating a

hyperlink. DDR, 773 F.3d at 1257. The DDR claims automatically generate a hybrid web page that permits users visiting a host website to view and purchase products from a third-party merchant, whose ads are displayed with hyperlinks on the host website, without leaving the host website and entering that merchant's website. *Id.* The Federal Circuit determined the claims to be directed to patent-eligible subject matter because they "specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." *Id.* at 1258. Thus, the solution set forth in the DDR claims "is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." Id. at 1257. Significantly, the Federal Circuit identified this as different from claims that "recite a commonplace business method aimed at processing business information, applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operations." *Id.* at 1258–59.

In contrast, upon determining whether a guest client is invited by a member client, Appellant's claims 26 and 36 control guest avatar activity and restrict freedom of movement to a limited area around the member avatar (Br. 11, 12 (Claims App.)), but do not purport to improve the functioning of the computer system itself or overcome a problem *arising* in the realm of computer networks. The problem with which the invention is concerned is limiting "the potential for abuse in having two users share a single membership (i.e., a paying or registered member and a guest)" (Spec. 3:1–3)—a problem existing before virtual environments and not rooted in

technology. A policy (e.g., rules) governing the privileges awarded to the guest of a member client (in order to allow potential members to try out a membership without paying for membership and without disruption to paying members) is a method of organizing human activity long prevalent in commerce and is a conventional and fundamental concept. This concept is not unique to the virtual world, and is not *rooted* in computer technology. *See also* Ans. 10 (the Examiner explaining that claims "rooted in long-known methods for organizing human activity are not solving a problem that only exists in the virtual world").

The claims merely apply a policy or rules governing the privileges awarded to the guest of a member client, using generic computers, to the particular technological environment of a modeled virtual reality environment. There is no indication that the elements recited in the claims produce "a result that overrides the routine and conventional" use of their known features. *DDR*, 773 F.3d at 1258. Indeed, the Federal Circuit has distinguished between claims that "merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet" and claims that are "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.* at 1257.

Accordingly, we find nothing in independent claims 26 or 36 to be sufficiently transformative to render the claims patent eligible. For these reasons, we sustain the Examiner's rejection of claims 26 and 36 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

Dependent claims 27–35 and 37–45

Appellant argues that recitations in the dependent claims "further evidence that the claims are not directed to 'methods of organizing human activities." Br. 8. In particular, regarding claims 31 and 41, Appellant asserts that "[a]t least instant messaging and in-game mail *do not reside outside of an electronic environment*, and the 'chat' referred to here is directed toward electronic chat, which also *does not exist in a non-electronic, non-computer world.*" *Id.* at 8–9 (emphasis added). Appellant also asserts that claims 32, 33, 42, and 43 recite limitations that "cannot be applied in the real world, and simply cannot be directed to 'organizing human activities." *Id.* at 9 (emphasis added). Regarding claims 34, 35, 44, and 45, Appellant similarly asserts that "[c]ontinuously determining a limited area' is simply *unworkable in the real world.*" *Id.* (emphasis added). We do not find these arguments persuasive.

We agree with the Examiner that the dependent "claims are merely a list of further details of abstract ideas for managing avatars that simulate human activity, applied in a generic computing environment" (Ans. 7) and "these further details that are intended to be applied to ideas for organizing the activity of an avatar character associated with a human user, so that it performs functions analogous to those long-known to be performed by human beings who are subject to guest-access restrictions in an exclusive members-only environment, are nothing more than further details of an abstract idea for organizing human activity" (*id.* at 6). To the extent that any of the additional operations recited in the dependent claims may not reside in the non-computer world (i.e., outside of the virtual reality environment), Appellant does not convince us that these operations are necessarily rooted

in computer technology to address a problem unique to the virtual reality environment.

We agree with the Examiner (Ans. 4–7) that the additional limitations recited in the dependent claims do not amount to significantly more than the abstract idea discussed above with respect to the independent claims. More specifically, the dependent claims do not recite "meaningful limitations beyond linking the[] idea[] to the generic computing environment defined by the parent claim[s]." *Id.* at 7. We find that the claims amount to nothing more than applying the abstract idea of a policy or rules for controlling the activity of guests of a member in a member-exclusive environment (albeit with more details regarding such policy or rules) using a generic computer to perform generic computer functions of executing operations.

Accordingly, we find nothing in dependent claims 27–35 and 37–45 to be sufficiently transformative to render the claims patent eligible, and we sustain the rejection of these claims under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

DECISION

The Examiner's decision to reject claims 26–45 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED